

WHAT IS CLAIMED IS:

1. A terminal usage limiting apparatus for temporary use with a mobile terminal communication, comprising:

5 a signal transmitter for transmitting a signal in a predetermined size of an area defining a restricted area where the use of the mobile terminal is restricted, the signal having a characteristics that is substantially indistinguishable from a predetermined characteristics of a base station; and

10 a message generator connected to said signal transmitter for generating said signal which includes information identifying the terminal usage limiting apparatus.

15 2. The terminal usage limiting apparatus for temporary use with a mobile terminal communication according to claim 1 wherein said message generator generates base station ID information and a pseudo control information message as
20 said signal.

3. The terminal usage limiting apparatus for temporary use with a mobile terminal communication according to claim 2 wherein said pseudo control information message includes

a handoff prompt signal indicative of a switch from the base station to the terminal usage limiting apparatus.

4. The terminal usage limiting apparatus for temporary use
5 with a mobile terminal communication according to claim 1 wherein said message generator generates a first command signal for disabling transmission from the mobile terminal.

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10 5. The terminal usage limiting apparatus for temporary use with a mobile terminal communication according to claim 1 wherein said message generator generates a second command signal indicative of a longer interval for receiving said signal at the mobile terminal.

15 6. The terminal usage limiting apparatus for temporary use with a mobile terminal communication according to claim 1 further comprising:

an access channel demodulator for demodulating a signal that is received from the mobile terminal; and

20 a message analyzer connected to said access channel demodulator for analyzing the demodulated signal.

7. The terminal usage limiting apparatus for temporary use with a mobile terminal communication according to claim 6
25 wherein said message analyzer determined that the

demodulated signal is a call origination message, said message generator generates a rejection message in response to the call origination message.

- 5 8. The terminal usage limiting apparatus for temporary use with a mobile terminal communication according to claim 6 further comprising:

a restricted phone number memory for storing a predetermined list of phone numbers that are allowed to call
10 in the restricted area;

an emergency call deciding device connected to said message analyzer and said restricted phone number memory for determining whether or not a requested phone number is an emergency call by comparing the requested phone number
15 to the predetermined list in response to a call origination message from said message analyzer; and

a hand-off directing device connected to said emergency call deciding device and said message generator for directing said message generator to generate an
20 emergency call hand-off message in response to the emergency call, the emergency call hand-off message including base station ID information on an available base
~~station.~~

9. The terminal usage limiting apparatus for temporary use
with a mobile terminal communication according to claim 8
wherein said message generator generates an emergency call
again message indicative of repeating the emergency call
5 to the mobile terminal.

10. The terminal usage limiting apparatus for temporary use
with a mobile terminal communication according to claim 1
wherein said message generator generates a usage limit
10 message indicative of the limited use of the mobile
terminal.

11. The terminal usage limiting apparatus for temporary use
with a mobile terminal communication according to claim 6
15 further comprising:

an adjacent base station information memory unit for
storing base unit information on base stations located near
the terminal usage limiting apparatus; and

a self-station pilot PN deciding device connected to
20 said adjacent base station information memory unit for
determining a unique one of said signal which includes
information identifying the terminal usage limiting
apparatus based upon the base unit information.

12. The terminal usage limiting apparatus for temporary use with a mobile terminal communication according to claim 11 further comprising:

5 a pilot strength measuring device connected to said adjacent base station information memory unit for measuring the strength of a pilot signal and updating the base unit information; and

an idle hand-off deciding device connected to said adjacent base station information memory unit for
10 determining whether or not to execute an idle handoff operation based upon the base unit information.

13. A mobile terminal for use in a restricted use area with a terminal usage limiting apparatus, comprising:

15 a receiver for receiving a signal for wireless communication;

a restricted phone number memory unit for storing a list of predetermined emergency numbers;

an emergency deciding device connected to said
20 restricted phone number memory unit for determining whether or not a requested phone number is an emergency by comparing the requested phone number to the predetermined emergency numbers;

a message generator connected to said emergency
25 deciding device for generating an emergency signal

indicative of emergency in response to said emergency deciding device; and

a transmitter connected to said message generator for transmitting said emergency signal.

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14. The mobile terminal for use in a restricted use area according to claim 13 further comprising:

a message analyzer connected to said receiver for analyzing the signal that is received from the terminal usage limiting apparatus, the received signal including a transmitter disable message; and

a transmitter stop directing device connected to said message analyzer for disabling said transmitter in response to the transmitter disable message.

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15. The mobile terminal for use in a restricted use area according to claim 13 further comprising:

a pilot strength measuring device connected to said receiver for measuring the strength of a pilot signal from a base station and the terminal usage limiting apparatus; and

a hand-off deciding device connected to said pilot strength measuring device for switching between the base station and the terminal usage limiting apparatus based upon the measured strength of the pilot signal, whereby the

use of the mobile terminal is restricted while the mobile terminal receives the signal from the terminal usage limiting apparatus.

5 16. The mobile terminal for use in a restricted use area according to claim 15 further comprising a display unit for indicating that the use of the mobile terminal is limited.

10 17. The mobile terminal for use in a restricted use area according to claim 15 further comprising an audio unit for indicating that the use of the mobile terminal is limited.

15 18. The mobile terminal for use in a restricted use area according to claim 15 further comprising a tactile unit connected for indicating that the use of the mobile terminal is limited.

20 19. The mobile terminal for use in a restricted use area according to claim 18 wherein said tactile unit is a vibrator, said vibrator vibrating at a predetermined frequency that is different from another predetermined frequency which is used to indicate an incoming call.

25 20. A method of restricting the use of a mobile terminal in a predetermined area, comprising:

determining a unique station information for
identifying a transmission source;

storing a predetermined set of emergency calls;

periodically transmitting to the mobile terminal a
5 signal including the unique station information in a
predetermined area;

receiving a signal from the mobile terminal;

determining whether or not the received signal is a
call origination request to one of the predetermined set
10 of the emergency calls; and

handing off the mobile terminal to a base station so
that the mobile terminal retransmits the signal to the base
station.

21. The method of restricting the use of a mobile terminal
in a predetermined area according to claim 20 further
comprising an additional act of periodically transmitting
to the mobile terminal the signal indicative limited use
of the mobile terminal.

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22. The method of restricting the use of a mobile terminal
in a predetermined area according to claim 20 further
comprising an additional acts of:

periodically collecting information on the base
25 station located near the transmission source;

periodically storing the information on the base station located near the transmission source; and periodically updating the information.

5 23. The method of restricting the use of a mobile terminal in a predetermined area according to claim 22 further comprising an additional act of periodically updating the unique station information for identifying the transmission source base upon the updated information on
10 the base station located near the transmission source.

24. The method of restricting the use of a mobile terminal in a predetermined area according to claim 20 wherein the base station transmits the signal that is the strongest in
15 transmission power with respect to the mobile terminal.

25. The method of restricting the use of a mobile terminal in a predetermined area according to claim 20 wherein a rejection message is sent to the mobile terminal in response
20 to the call origination.

26. The method of restricting the use of a mobile terminal in a predetermined area according to claim 25 wherein the rejection message is communicated to a user.

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27. The method of restricting the use of a mobile terminal in a predetermined area according to claim 26 wherein the communication is visual.

28. The method of restricting the use of a mobile terminal in a predetermined area according to claim 26 wherein the communication is tactile.

29. The method of restricting the use of a mobile terminal in a predetermined area according to claim 26 wherein the communication is auditory.

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